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IN THE CLAIMS:

Please delete claims 20-22 and add new claims 40-42.

Upon entry of this amendment, claims 1-4, 6, 7, 9-15, 17, 18 and 33-36 and 40-45 will be pending.

This listing of claims will replace all prior versions, and listings, of claims in the application.

- 1. (previously presented) A pyrogen-free composition comprising a plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements and a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-1, MIP-1α, MIP-1β, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1, Mac-1, p150.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-1, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE.
- 2. (original) The plasmid of claim 1 wherein said immunogen is a target protein that encodes a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases.
- 3. (original) The plasmid of claim 1 wherein said immunogen is a pathogen antigen.
- 4. (original) The plasmid of claim 1 wherein said immunogen is an HIV-1 antigen.
- 5. (canceled)

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- 6. (original) An injectable pharmaceutical composition comprising the plasmid of claim 1.
- 7. (original) A method of inducing an immune response in an individual against an immunogen comprising administering to said individual a plasmid of claim 1.
- 8. (canceled)
- (previously presented) The plasmid of claim 1 wherein said immunogen is herpes simplex antigen HSV2gD.
- 10. (previously presented) An injectable pharmaceutical composition comprising the plasmid of claim 9.
- 11. (previously presented) A method of immunizing an individual against a herpes simplex virus infection comprising administering to said individual a plasmid of claim 9.
- 12. **(previously presented** A pyrogen-free composition comprising two plasmids:
- a first plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements; and
- a second plasmid comprising a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-1, MIP-la, MIP-1p, IL-8, RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1, Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3,

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CD2, LFA-3, M-CSF, G-CSF, IL-4, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-1, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE.

- 13. (original) The composition of claim 12 wherein said immunogen is a target protein that encodes a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases.
- 14. (original) The composition of claim 12 wherein said immunogen is a pathogen antigen.
- 15. (original) The composition of claim 12 wherein said immunogen is an HIV-1 antigen.
- 16. (canceled)
- 17. (original) An injectable pharmaceutical composition comprising the composition of claim 12.
- 18. (original) A method of inducing an immune response in an individual against an immunogen, comprising administering to said individual a composition of claim 12.
- 19-32. (canceled)
- 33. (previously presented) A method of inducing an immune response in an individual against an immunogen comprising administering to said individual:

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a nucleic acid molecule comprising a nucleotide sequence that encodes said immunogen operable linked to regulatory elements; and

a nucleic acid molecule comprising a nucleotide sequence that encodes said immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of : MCP-1, MIP-1α, MIP-1β, IL-8, RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1, Mac-1, p150.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA-3, M-CSF, G-CSF, IL-4, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-1, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE.

- 34. (original) The method of claim 33 wherein said immunogen is a target protein that encodes a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases.
- 35. (previously presented) The method of claim 33 wherein said immunogen is a pathogen antigen.
- 36. (original) The method of claim 33 wherein said immunogen is an HIV-1 antigen.
- 37-39 (canceled)
- 40. (new) The plasmid of claim 1 wherein said immunogen is a viral antigen.
- 41. (new) The method of claim 12 wherein said immunogen is a viral antigen.

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42. (new) The composition of claim 12 wherein said immunogen is herpes simplex antigen HSV2gD.

- 43. (new) An injectable pharmaceutical composition comprising the composition of claim 42.
- 44. (new) A method of immunizing an individual against a herpes simplex virus infection comprising administering to said individual a composition of claim 42.
- 45. (new) The method of claim 33 wherein said immunogen is a viral antigen.